

WHAT WE CLAIM IS:

1. A cleaner that is an aqueous solution containing phosphoric acid, hydrofluoric acid, and ammonia and/or amine and having a pH ranging from 2 to 12, wherein  
5 said aqueous solution contains:  
0.5 to 25 mass% of phosphoric acid,  
0.1 to 10 mass% of ammonia and/or amine, and  
 $5 \times 10^{-3}$  to 5.0 mass% of hydrofluoric acid.
2. The cleaner according to claim 1, wherein the  
10 pH is regulated by phosphoric acid.
3. The cleaner according to claim 1 or 2, which further includes a surface active agent and/or a chelate agent.
4. The cleaner according to any one of claims 1  
15 to 3, which further includes hydrogen peroxide.
5. The cleaner according to any one of claims 1 to 4, which is used for cleaning off particles and/or metal impurities out of the surface of a semiconductor device substrate.

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